Bruhat Bengaluru
Mahanagara Palike

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

FINAL E-BILL

Name of Work:- Improvements of Anganawadi buildings and Improvements of Government school buildings in ward no-04 of Yelahanka Satellite town sub division.

Modified Estimated Cost RS :- 102.86 Lakhs

Agency:-Sri T S Kothandaraju(Proprietor R KCHARAN CONSTRUCTIONS,Proprietor SHREE CHARAN CONSTRUCTIONS)

JOB CODE NO:-004-20-000032

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of Work:- Improvements of Anganawadi buildings and Improvements of Government School buildings in ward no-0 of Yelahanka Satellite town sub division.

Agency:-Sri.T.S.Kothanda Raju

Final E- Bill

S.No	Description of item's	Unit	Previous		Present			Total Up to Date	
			Qty	Amount	Qty	Rate	Amount	Qty	Amount
1	Provision for Dismantling of Existing RCC Structure and removing the debris as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental charges etc.**(BCSR Item No 18.19, Page No.139)**	Cum			18.58	1766.03	**32820.34**	18.58	**32820.34**
2	Provision for Dismantling of Existing Brick masonry and removing the debris as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental chargesetc.**(BCSR Item No 18.23, Page No.139)**	Cum			35.31	397.47	**14036.34**	35.31	**14036.34**
3	Earthwork in surface excavation for levelling and lowering the ground manually (Other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up to 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled including breaking of clods and neatly dressed as per specifications.No.KBS 2.1 (a)/2.3.1 KSRB 2-1.1:-do- ordinary soil **(BCSR Item No 2.1 Page No 6)**	Cum							
	A)Up to125% of quantity				293.59	281.96	**82779.93**	293.59	**82779.93**
	B)Above 125% of quantity				79.19	281.96	**22329.12**	79.19	**22329.12**
4	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 ems. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labourcomplete as per specifications.**(BCSR Item No 2.10, Page No** 7)	Cum			186.40	227.61	**42426.96**	186.40	**42426.96**

5	Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits, with chloropyriphos emulsifiable concentrates of 20% concentration at 3.19 Litre/sqm., including cost of chemical, diluting in water to one percent concentration, labour, HOM complete as per specifications. (Plinth area of the building at ground floor only shall be measured)**(BCSR Item No 3.2,Page No. 10)**	Sqm								
	A)Up to125% of quantity				268.18	120.03	**32189.05**	268.18	**32189.05**
	B)Above 125% of quantity				91.83	120.03	**11021.75**	91.83	**11021.75**
6	KSRB 2.8: Providing and Filling in foundation with granite / trap broken metal 100mm. And down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. Complete as per specifications. (P.No.7, I.No.2.15 of PW, P&IWTD SR 2018-19)	Cum			59.60	2750.55	**163927.28**	59.60	**163927.28**
7	**KSRRB M300-Construction of Embankment with Material Gravel/Murrum** KSRRB M300-53. Construction of embankment with approved material Gravel /Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density. MORTH Specification No. 305. (P.No.147, I.No.19.60 of PW, P&IWTD SR 2018-19)	cum			96.17	368.02	**35391.20**	96.17	**35391.20**

8	KSRB 4-1.2:Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @0.57cum machine mixed,machine mixed,concrete laid in layers not exeeding 15cms.thick, well compacted in foundation,including cost of all materials,labour,HOM of machinery,curing complete as per specifications.Specification no KBS4.1,4.2(Item no 4.2,Page no12,PWD SR 2018-19)	Cum			119.40	5881.58	**702257.56**	119.40	**702257.56**
9	Providing and constructing granite I trap I basalt size stone masonry in foundation with cement mortar, stone hammered dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour,curing complete as per specifications.**(BCSR Item No 5.6,Page No. 25)**	Cum							
	A)Up to125% of quantity				32.38	5204.42	**168493.10**	32.38	**168493.10**
	B)Above 125% of quantity				6.48	5204.42	**33749.36**	6.48	**33749.36**
10	Providing 20mm thick cement plaster (cement mortar 1:4) in single coat with cement mortar, to stone masonry & concrete surface including rounding off comers wherever required smooth rendering, including providing and removing scaffolding, cost of materials, labour, curing etc., complete as per specification.**(BCSR Item No. 15.19/ 15.32, PageNo.116/ 117)**	Sqm			84.34	306.87	**25881.42**	84.34	**25881.42**
11	KSRB 4-1.7 : Providing and laying in position plain cement concrete of Mix 1 :3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 ems. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.Specification No. KBS 4.1, 4.2 **(BCSR Item No 4.7,Page No 13)**	cum			27.12	6011.81	**163064.03**	27.12	**163064.03**

12	Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 ems. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curingcomplete as per specifications.**(BCSR Item No 4.6,Page No 13)**	cum							
	A)Up to125% of quantity				15.63	6139.76	**95933.75**	15.63	**95933.75**
	B)Above 125% of quantity				32.46	6139.76	**199285.87**	32.46	**199285.87**
13	Providing and laying in position reinforced cement concrete of design Mix M25 with OPC @ 340kgs, with 20mm anddown size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with super plasticisers @31ts confirming to 189103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 ems thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, lintles, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications.**(BCSR Item No 4.12, Page No.14) Ground Floor.**	Cum							
	A)Up to125% of quantity				157.64	6845.24	**1079066.52**	157.64	**1079066.52**
	B)Above 125% of quantity				16.57	6845.24	**113412.28**	16.57	**113412.28**

53	Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications.-do- using silver grey granite/Multy Red/Ruby Red/Black/ Hassan Green Granite of width not less than 1200mm.**(BCSR Item No 14.47.1, Page No.109) Ground Floor:-**	Sqm			11.28	3101.59	**34985.94**	11.28	**34985.94**
54	Providing skirting, dadoing, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, completeas per specifications.**(BCSR Item No 14.41.1, Page No.108) Ground Floor**	Sqm			24.00	1439.15	**34539.60**	24.00	**34539.60**
55	Providing and fixind of factory made 30mm P.V.C rigid foam PANEL DOORS made from MS tube of 19 guage, size of 19mm x 19mm and covered with heat moulded PVC C Channel of 5 mm thick and width of 50mm to form styles and rails. The inner panel should be inserted in between the frame with 5mm thick PVC rigid foam sheet, weldedfsealed to the styles and rails along with 5mm PVC, heeding on all and either sides. The vertical tubes may be filled with suitable wood material tofurther enhance the screw holding capacity **(Refer BCSR item 9.91, Page No. 62) Ground Floor**	Sqm			1.89	2722.24	**5145.03**	1.89	**5145.03**
56	KSRB 7.1 : Providing and fixing in position collapsible steel shutters with single or double leaf with vertical channel 20mmx1 Ommx2mm braced with flat iron diagonals 20mmx5mm size, with top and bottom rails ofT iron sections of 40x40x6 mm with 38mm dia steel pulleys complete with bolt and nuts, locking arrangements, stoppers, handles on both sides with 7.5cms openings at 10 ems. c to c applying a priming coat of red lead paint. cost of materials, labour, HOM complete as per specifications. size of gate 2.4mx1.4m Specification No. KBS 7.7/7.12 **(BCSR Item No 7.1,Page No. 33) Ground Floor**	Sqm			4.83	5899.70	**28495.55**	4.83	**28495.55**

63	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications.**(BCSR Item No 15.53.2, Page No.120) First Floor:-**	Sqm							
	A)Up to125% of quantity				208.95	129.09	**26973.36**	208.95	**26973.36**
	B)Above 125% of quantity				40.78	121.79	**4966.60**	40.78	**4966.60**
64	KSRB 7.8 : Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung/top hung 2/3 openable 1/3 fixed as per approved drawings using Z angles of 25x33x3mm, weighing 1.419 kg/m both for outer and inner frames and central mullion section of size 25x46x3mm, weighing 2.28kg/m all duly providing T section 19x19x3mm weighing 0.839 kg/m for glazing of windows, not more than 34 cms. c to c including providing and fixing 4mm. thick reeded glass with teakwood beading of required size, all steel sections should confirm to I.S 7452:1990, 4nos. of holdfasts of approved size, section should be cut to length welded and grinded electrically subdividing frames of unit shall be tenonned and revetted into the frames electrically. All the steel surface shall be throughly cleaned free of rust and painted with one coat of anti-corrosive paint and finishing two coats of ready mix paint of approved colour and make including cost of materials, fixtures,labour charges and HOM complete as per specifications.**(BCSR Item No 7.8 Page No. 34) Ground floor:-**	Sqm			22.88	3768.56	**86234.07**	22.88	**86234.07**

65	KSRB 7.8 : Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung/top hung 2/3 openable 1/3 fixed as per approved drawings using Z angles of 25x33x3mm, weighing 1.419 kg/m both for outer and inner frames and central mullion section of size 25x46x3mm, weighing 2.28kg/m all duly providing T section 19x19x3mm weighing 0.839 kg/m for glazing of windows, not more than 34 ems. c to c including providing and fixing 4mm. thick reeded glass with teakwood beading of required size, all steel sections should confirm to I.S 7452:1990, 4nos. of holdfasts of approved size, section should be cut to length welded and grinded electrically subdividing frames of unit shall be tenonned and revetted into the frames electrically. All the steel surface shall be throughly cleaned free of rust and painted with one coat of anti-corrosive paint and finishing two coats of ready mix paint of approved colour and make including cost of materials, fixtures,labour charges and HOM complete as per specifications.**(BCSR Item No 7.8 Page No. 34) First Floor**	Sqm			20.88	3775.35	**78829.31**	20.88	**78829.31**
66	Providing and fixing MS grill work for windows and ventilators weighing 21 kgs./ sqm. using MS flats or MS square bars or combination of MS flats and square bars as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat red lead primer & two coats synthetic enamel paint, cost of materials, fixtures, labour and HOM of machinery complete as per technical specification and as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental charges etc.**(BCSR Item No 7.9,Page No. 34) Ground Floor**	Kgs			215.46	107.58	**23179.19**	215.46	**23179.19**

67	Providing and fixing MS grill work for windows and ventilators weighing 21 kgs./ sqm. using MS flats or MS square bars or combination of MS flats and square bars as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat red lead primer & two coats synthetic enamel paint, cost of materials, fixtures, labour and HOM of machinery complete as per technical specification and as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental charges etc**(.BCSR Item No 7.9,Page No. 34) First Floor**	Kgs			107.73	114.37	**12321.08**	107.73	**12321.08**
68	KSRB 15-17.4 : Applying priming coat over new wood surface and I or wood based surface, after brushing with ready mix enamel priming paint including preparing the surface after thoroughly cleaning oil, grease, dirt and foreign matter, sand papering and knotting ready mix paint including cost of materials, labour, complete as per specifications.**(BCSR Item No 15.58, Page No.121) First Floor:-**	Sqm							
	A)Up to125% of quantity				12.60	61.15	**770.49**	12.60	**770.49**
	B)Above 125% of quantity				41.67	60.81	**2533.95**	41.67	**2533.95**
69	KSRB 15-17.6 : Providing and applying painting two coats (excluding priming coat) on new wood surface and I or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as perspecifications.**(BCSR Item No 15.60.1, Page No.121) Ground Floor :-**	Sqm							
	A)Up to125% of quantity				41.20	109.84	**4525.41**	41.20	**4525.41**
	B)Above 125% of quantity				13.07	109.84	**1435.61**	13.07	**1435.61**
70	KSRB 15-17.6 : Providing and applying painting two coats (excluding priming coat) on new wood surface and I or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as perspecifications.**(BCSR Item No 15.60.1, Page No.121) First Floor:**	Sqm							

	A)Up to125% of quantity				12.60	114.37	**1441.06**	12.60	**1441.06**
	B)Above 125% of quantity				41.67	114.03	**4751.63**	41.67	**4751.63**
71	Providing and fixing sand cast iron soil waste and vent pipes with spun yarn soaked in cement slurry and cement mortar 1 :2 including cost of materials, labour, testing complete as perspecifications.**(BCSR Item No 12.47, Page No.85)**	Mtr			30.00	754.17	**22625.10**	30.00	**22625.10**
72	Constructing brick masonry Inspection chamber for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover withframe (light duty) internal dimensions. total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete M 15 with 20mm and downsize granite metal, foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1 :3, finish smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. - 450x300mm and 450mm depth (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover withframe (light duty) 450x300mm **(BCSR Item No 11.50.4, Page No.76)**	Cum			1.00	4303.04	**4303.04**	1.00	**4303.04**
73	Providing and fixing to wall, ceiling and floor, medium density polyethylene pipes 6.00 kgs/sq.cm working pressure of outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM and testing complete as per specifications.-90 mm dia **(BCSR Item No 13.70.4, Page No.95)**	Mtr			30.00	430.30	**12909.00**	30.00	**12909.00**

74	Supplying heavy gauge PVC conduit pipe ... ... mm dia mmthick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary. 19/20mm dia 2mm thick **(As per SR 19-20, Item No. 1.2.1, Page No.2)**	Mtr			230.00	41.94	**9646.20**	230.00	**9646.20**
75	Supplying heavy gauge PVC conduit pipe ... ... mm dia mmthick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary. 25mm dia 2mm thick **(As per SR 19-20, Item No. 1.2.2, Page No.2)**	Mtr			370.00	55.57	**20560.90**	370.00	**20560.90**
76	Supplying heavy gauge PVC Conduit Pipe ....dia .....mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduitwherever necessary. 25mm dia 2mm thick **(As per SR 19-20, Item No. 1.3.2, Page No.2)**	Mtr			80.00	56.62	**4529.60**	80.00	**4529.60**
77	Supplying And Fixing Metal Fan Box with Round Hook.**(As per SR 19-20, Item No. 1.12, PageNo.3)**	Nos			20.00	89.12	**1782.40**	20.00	**1782.40**

78	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm(Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLSmulti strand PVC insulated copper wire (confirming toIS- 694: and latest amendments) without control switchshall be fixed on the existing plastic sheet/ gang box, theother end of the wires shall be terminated with sufficientloose length in a wood/PVC round block. complete for eachoutlet. Short point upto 3Mtr from tapping point to out let via switchbox **(As per SR 19-20, Item No. 2.2.1, Page No.5)**	Nos			6.00	167.76	**1006.56**	6.00	**1006.56**
79	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm(Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLSmulti strand PVC insulated copper wire (confirming toIS- 694: and latest amendments) without control switchshall be fixed on the existing plastic sheet/ gang box, theother end of the wires shall be terminated with sufficientloose length in a wood/PVC round block. complete for eachoutlet. Medium point above 3Mtr upto 6Mtr from tapping point to outlet via switch box.**(As per SR 19-20, Item No. 2.2.2, Page No.5)**	Nos			19.00	262.13	**4980.47**	19.00	**4980.47**
80	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm(Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLSmulti strand PVC insulated copper wire (confirming toIS- 694: and latest amendments) without control switchshall be fixed on the existing plastic sheet/ gang box, theother end of the wires shall be terminated with sufficientloose length in a wood/PVC round block. complete for eachoutlet. Long point above 6Mtr upto 10Mtr from tapping point to outlet via switch box.**(As per SR 19-20, Item No. 2.2.3, Page No.5)**	Nos			6.00	393.19	**2359.14**	6.00	**2359.14**

92	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 withShort circuit breaking capacity of 10K and complete wiring as requiredconfirming to IEC 60898. 6-32Amps SP **(As per SR 19-20, Item No. 5.17.1,Page No.27)**	Nos			3.00	455.05	**1365.15**	3.00	**1365.15**
93	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 withShort circuit breaking capacity of 10K and complete wiring as requiredconfirming to IEC 60898. 6-32Amps DP **(As per SR 19-20, Item No. 5.17.4,Page No.27)**	Nos			2.00	953.09	**1906.18**	2.00	1906.18
94	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure. 6Way SP &N , Double door **(As per SR 19-20, Item No. 5.18.6,Page No.28)**	Nos			2.00	1363.05	**2726.10**	2.00	2726.10
	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-1554:1990 (No.of Strip indicated in GTP & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A (55/7.4) , 4 core 10 sqmm **(As per SR 14-15, Item No. 7.4.2, Page No.55)**	Nos			35.00	124.56	**4359.60**	35.00	4359.60

96	Supply of round/square recess/surface mounted rolling type LED Down light with W GU 10 LED Lamp RibFabricated from Diecast aluminium with white powdercoated prewired to mains connector & has swiveling unit ofaluminium die cast eye ball & LED Lamp position retained bycircular wire spring, with Life of 25000 burning hours & 70%lumen maintenance with CRI > 80. Power Input: 220-240V@ 50/60Hz & Power factor >0.9 along with CE approved. 2years Warranty against any manufacturing defect working under standard electrical condition. LED square or rounddown light 10-12W **(As per SR 19-20, Item No. 12.5.2,Page No.65)**	Nos			20.00	805.25	**16105.00**	20.00	**16105.00**
97	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 56" Sweep (1400mm) Regular model **(As per SR 19-20, Item No. 7.3.2, Page No.46)**	Nos			6.00	2230.16	**13380.96**	6.00	**13380.96**
								Total RS	**9052693.25**
								12% of GST	1086323.19
								Grand Total RS	**10139016.44**

CERTIFICATE

1 Certified that the above work done is satisfactory completed to work.

2 Certified that the there is no debries have been cleared to site

Agency Signature

Assistant Engineer
Ward No-04

Assistant Executive Engineer
Yelahanka Satellite Town Sub Division